

Claims

1. A bumper for engaging at least one of a rear surface and a side surface of a vehicle that is adjacent a dock face of a loading dock, the bumper comprising:
an engagement member attachable to the loading dock and being adapted to engage the rear surface of the vehicle; and
a guide member adjacent the engagement member and being adapted to help guide the vehicle toward the engagement member.
2. The bumper of claim 1, wherein the guide member protrudes further from the dock face than does the engagement member.
3. The bumper of claim 1, wherein the engagement member extends higher than the guide member.
4. The bumper of claim 1, wherein the guide member is adapted to engage the side surface of the vehicle.
5. The bumper of claim 1, wherein the guide member includes a tapered surface adapted to engage the side surface of the vehicle.
6. The bumper of claim 1, further comprising a sensor responsive to the position of the vehicle relative to the bumper.

7. The bumper of claim 6, wherein the sensor is responsive to the position of the vehicle relative to the engagement member.
8. The bumper of claim 6, wherein the sensor is responsive to the position of the vehicle relative to the guide member.
9. The bumper of claim 6, wherein the sensor includes a photoelectric cell.
10. The bumper of claim 6, wherein the sensor includes a proximity switch.
11. The bumper of claim 6, wherein the sensor includes a limit switch.
12. The bumper of claim 6, wherein the sensor includes a pressure switch.
13. The bumper of claim 6, wherein the sensor is coupled to the guide member.
14. The bumper of claim 6, wherein the sensor is coupled to the engagement member.
15. The bumper of claim 6, further comprising a light responsive to the sensor.
16. The bumper of claim 15, wherein the light is adjacent the guide member.

17. The bumper of claim 1, wherein the guide member includes an anti-friction member.
18. The bumper of claim 17, wherein the anti-friction member includes a roller.
19. The bumper of claim 1, wherein the engagement member and the guide member are attachable to the dock face.
20. A bumper for engaging at least a rear surface of a vehicle that is adjacent a dock face of a loading dock, the bumper comprising: an engagement member adapted to be mounted to the dock face and having a generally L-shape, wherein a first leg of the L-shape is adapted to engage the rear surface of the vehicle when the vehicle is at a certain proper position relative to the bumper, and wherein a second leg of the L-shape is adapted to engage the rear surface of the vehicle when the vehicle is at a certain improper position relative the bumper.
21. The bumper of claim 20, wherein the second leg protrudes further from the dock face than does the first leg.
22. The bumper of claim 20, wherein the first leg extends higher than the second leg.

23. The bumper of claim 20, further comprising a sensor responsive to the position of the vehicle relative to the bumper.
24. The bumper of claim 23, wherein the sensor is responsive to the position of the vehicle relative to the first leg.
25. The bumper of claim 23, wherein the sensor is responsive to the position of the vehicle relative to the second leg.
26. The bumper of claim 23, wherein the sensor includes a photoelectric cell.
27. The bumper of claim 23, wherein the sensor includes a proximity switch.
28. The bumper of claim 23, wherein the sensor includes a limit switch.
29. The bumper of claim 23, wherein the sensor includes a pressure switch.
30. The bumper of claim 23, wherein the sensor is coupled to the second leg.
31. The bumper of claim 23, wherein the sensor is coupled to the first leg.

32. The bumper of claim 23, further comprising a light responsive to the sensor.
33. The bumper of claim 32, wherein the light is adjacent the second leg.
34. A bumper system for engaging a rear surface of a vehicle that is adjacent a dock face of a loading dock, the bumper system comprising:
an engagement member attachable to the loading dock and being adapted to engage the rear surface of the vehicle when the vehicle is at a predetermined proper position relative to the bumper system; and
a guide member adjacent the engagement member and being adapted to engage the rear surface of the vehicle when the vehicle is at a predetermined improper position relative to the bumper system, wherein the guide member is adapted to protrude further away from dock face than what the engagement member is adapted to protrude.
35. The bumper system of claim 34, further comprising a dock leveler that includes a ramp pivotal relative to the loading dock and a lip movable relative to the ramp between an extended position to reach the vehicle and a stored position to clear the vehicle, wherein guide member is adapted to protrude further away from the dock face than what the lip is adapted to protrude when in the extended position.
36. The bumper system of claim 34, wherein the engagement member extends higher than the guide member.
37. The bumper system of claim 34, further comprising a sensor responsive to the position of the vehicle relative to the bumper system.

38. The bumper system of claim 37, wherein the sensor is responsive to the position of the vehicle relative to the engagement member.
39. The bumper system of claim 37, wherein the sensor is responsive to the position of the vehicle relative to the guide member.
40. The bumper system of claim 37, wherein the sensor includes a photoelectric cell.
41. The bumper system of claim 37, wherein the sensor includes a proximity switch.
42. The bumper system of claim 37, wherein the sensor includes a limit switch.
43. The bumper system of claim 37, wherein the sensor includes a pressure switch.
44. The bumper system of claim 37, wherein the sensor is coupled to the guide member.
45. The bumper system of claim 37, wherein the sensor is coupled to the engagement member.

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| 11 | 21 | 31 | 41 | 51 | 61 | 71 | 81 | 91 | 101 | 111 | 121 | 131 | 141 | 151 | 161 | 171 | 181 | 191 | 201 | 211 | 221 | 231 | 241 | 251 | 261 | 271 | 281 | 291 | 301 | 311 | 321 | 331 | 341 | 351 | 361 | 371 | 381 | 391 | 401 | 411 | 421 | 431 | 441 | 451 | 461 | 471 | 481 | 491 | 501 | 511 | 521 | 531 | 541 | 551 | 561 | 571 | 581 | 591 | 601 | 611 | 621 | 631 | 641 | 651 | 661 | 671 | 681 | 691 | 701 | 711 | 721 | 731 | 741 | 751 | 761 | 771 | 781 | 791 | 801 | 811 | 821 | 831 | 841 | 851 | 861 | 871 | 881 | 891 | 901 | 911 | 921 | 931 | 941 | 951 | 961 | 971 | 981 | 991 | 1001 | 1011 | 1021 | 1031 | 1041 | 1051 | 1061 | 1071 | 1081 | 1091 | 1101 | 1111 | 1121 | 1131 | 1141 | 1151 | 1161 | 1171 | 1181 | 1191 | 1201 | 1211 | 1221 | 1231 | 1241 | 1251 | 1261 | 1271 | 1281 | 1291 | 1301 | 1311 | 1321 | 1331 | 1341 | 1351 | 1361 | 1371 | 1381 | 1391 | 1401 | 1411 | 1421 | 1431 | 1441 | 1451 | 1461 | 1471 | 1481 | 1491 | 1501 | 1511 | 1521 | 1531 | 1541 | 1551 | 1561 | 1571 | 1581 | 1591 | 1601 | 1611 | 1621 | 1631 | 1641 | 1651 | 1661 | 1671 | 1681 | 1691 | 1701 | 1711 | 1721 | 1731 | 1741 | 1751 | 1761 | 1771 | 1781 | 1791 | 1801 | 1811 | 1821 | 1831 | 1841 | 1851 | 1861 | 1871 | 1881 | 1891 | 1901 | 1911 | 1921 | 1931 | 1941 | 1951 | 1961 | 1971 | 1981 | 1991 | 2001 |
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